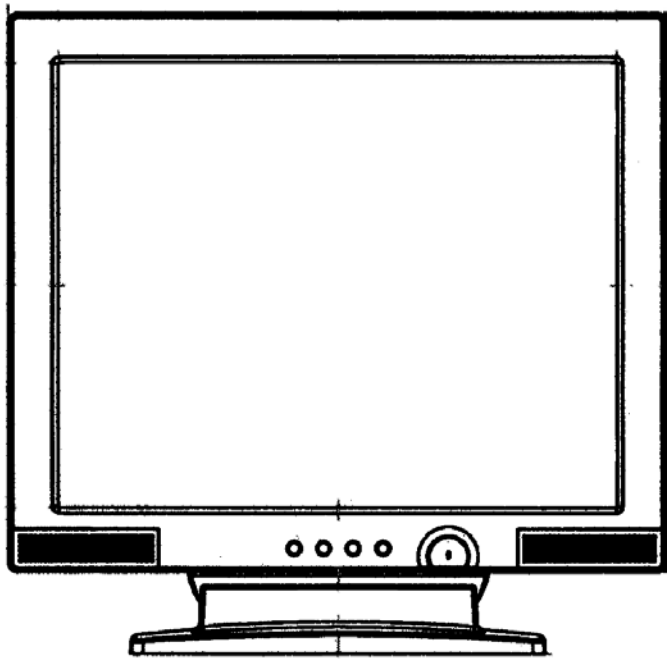
Service Manual



Model : Belinea 101725

Art. No. 111707

MAXDATA Systeme GmbH

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Contents

Belinea 101725 Service Manual

First edition April 2003

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1 Safety Precautions

1-1-1 Warnings

1. For continued safety, do not attempt to modify the circuit board.

2. Disconnect the AC power Jack before servicing.

1-1-2 Servicing the LCD Monitor

1. When servicing the LCD Monitor Disconnect the AC line cord from the AC outlet.

2. It is essential that service technicians have an accurate voltage meter available at all times. Check the calibration of this meter periodically.

1-1-3 Fire and Shock Hazard

Before returning the monitor to the user,perform the following safety checks :

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.

2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.

3. To be sure that no shock hazard exists, check for leakage current in the following manner.
   Warning : Do not use an isolation transformer during this test.

   a. Plug the AC line cord directly into a 120 Volt AC outlet.

   b. Unisg two clip leads, connect 1.5㏀ , 10 watt resistor paralleled by a 0.15㎌ capacitor in series with an exposed metal cabinet part and a known earth ground, such as an electrical conduit or electrical ground connected to an earth ground.

c. Use a SSVM or VOM with 1000 ohms per-volt or higher sensitivity to measure the AC voltage drop across the resistor (see Figure 1-1).

d. Connect the resistor to an exposed metal part having a return path to the chassis(metal cabinet, screw heads, knobs, shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

e. Any reading of 5.25 Volt RMS (this corresponds to 3.5 milliampere AC) or more is excessive and indicates a potential shock hazard. Correct the shock hazard before returning the monitor to the user.

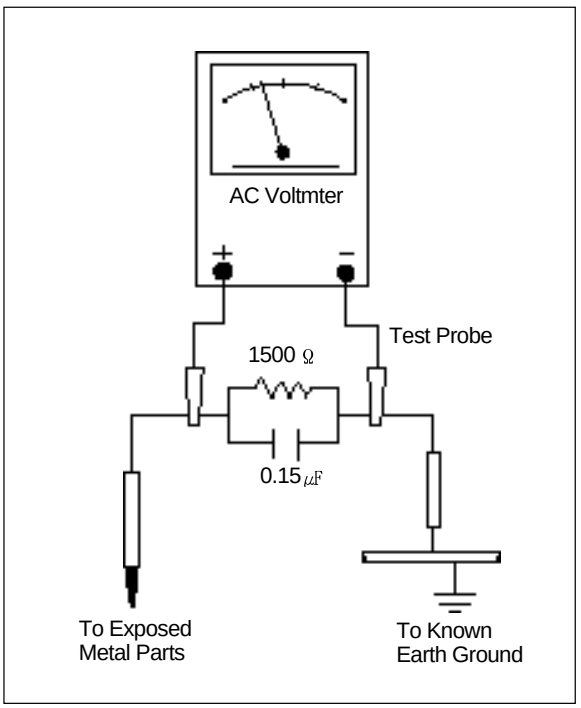


Figure 1-1.
Leakage Current Test Circut

1-1-4 Product Safety Notices

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacement that does not have the same safety characteristics as the recommended replacement part may create shock, fire and /or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2 Servicing Precautions

WARNING : An electrolytic capacitor installed with the wrong polarity might explode.

Caution : Before servicing instruments covered by this service manual and its supplements, read and follow the Safety Precautions section of this manual.

Note : If unforeseen circumstances create conflict between the following servicing preautions and any of the safety precautions, always follow the safety precautions.

1-2-1. General Servicing Precautions

1. Servicing precautions are printed on the cabinet, and should be followed closely.

2. Always unplug the unit's AC power cord from the AC power source before attempting to :
   (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors,
   (c) connect a test component in paralled with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples; metal panels, input terminals and earphone jacks)

6. Insulation Checking Procedure : Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter(500V) to the blades of the AC plug.
   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Electrostatically Sensitive Devices(ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. such components are commonly called Electrostatically Sensitive Devices(ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the monitor.

2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.

3. Do not use freon-propelled chemicals. These can generate electrical charges Sufficient to damage ESDs.

4. Use only a ground-tip soldering iron to solder ESDs.

5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.

6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most relacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foid or other conductive materials.

7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution : Be sure no power is applied to the chassis or circuit and observe all other safety precautions.

8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your font from a carpeted floor can generate enough static electricity to damage an ESD.

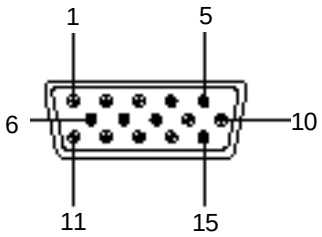
2. Product Specifications

2-1 Specifications

LCD PANEL	Model	Belinea 101725
	Type	Amorphous Active Matrix Super TFT LCD
	Screen Size	43.2cm (Diagonal)
	Maximum Resolution	1280 X 1024 @ 75Hz
	Pixel Range	0.264mm X 0.264mm
	Display Colors	16.2M
	Contrast Rate	350 : 1
	Viewing Angle	70° / 70° / 60° / 60° (left / right / up / down)
	Response Speed	25ms
	Brightness	250 cd/m2
Synchornization	Horizontal Frequency	79.9KHz(Max)
	Vertical Frequency	75HZ(Max)
Video Input	Video Signal	Analog RGB (0.714Vpp) 75 ohm
	Synchronous Signal Mode	H,V separate TTL Sync,SOG,COMPOSITE
Power Consumption	Maximum	48W
	Power Saving Mode	Under 1W
Control Keys	Front part	MUTE,MENU,SELECT/AUTO,POWER, - , + , VOL SWITCH
Audio Output	Normal	1W/Ch
	Max	1.5W/Ch
Combo board		90~240Vac(50~60Hz),0.65A
Wall Mount		VESA Standard
Safety & EMI	Safety Standard	CB,TUV
	EMI	CE
	Low Radiation	TCO' 99
Dimension	Size and Weight	380 X 176 X 368 / 5.8Kg

2-2 Pin Assignment

The 15-pin D-sub connector(male) of the signal cable(IBM systems)



Pin No	Assignment	Pin No	Assignment
1	Red Video	9	5V Input
2	Green Video	10	Ground
3	Blue Video	11	Ground
4	N.C	12	SDA (DDC Data)
5	Ground	13	H-Sync
6	Red Video Ground	14	V-Sync
7	Green Video Ground	15	SCL (DDC Clock)
8	Blue Video Ground		

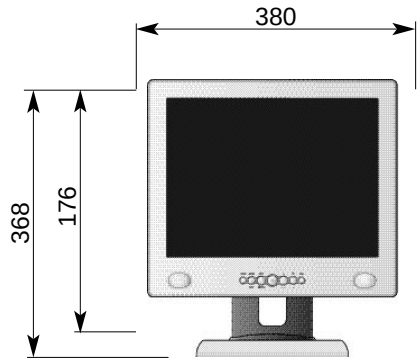
2-3 Timing chart

This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

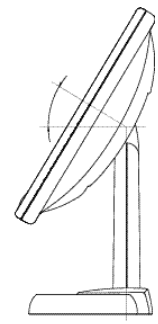
No.	Display Mode	Hor. Freq (kHz)	Ver. Freq (Hz)	Dot Clock (MHz)
1	VGA (720 X 400)	31.469	70.087	28.322
2	VGA (640 X 480)	31.469	59.940	25.175
3	VGA (640 X 480)	37.500	75.000	31.500
4	SVGA (800 X 600)	37.900	60.320	40.000
5	SVGA (800 X 600)	46.875	75.000	49.500
6	XGA (1024 X 768)	48.363	60.004	65.000
7	XGA (1024 X 768)	60.023	75.029	78.750
8	SXGA (1280 X 1024)	63.981	60.020	108.000
9	SXGA (1280 X 1024)	79.976	75.025	135.000
10	MAC (640 X 480)	35.000	66.667	30.240
11	MAC (832 X 624)	49.726	74.551	57.284
12	MAC (1152 X 870)	68.681	75.062	100.000

2-4 Dimensions

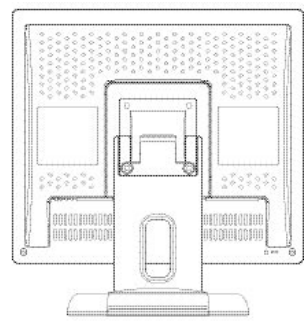
■FRONT VIEW



■SIDE VIEW



■REAR VIEW



3. Disassembly and Reassembly

The section of the service manual describes the disassembly and reassembly procedure for the Belinea 101725 Monitor.

※ WARNING : This has to be disassembled and reassembled carefully because TFT-LCD Panel is weak for impact. This monitor contains electrostatically sensitive devices. Use caution when handling these components.

3-1 Disassembly

Cautions : 1. Disconnected the monitor from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

3-1-1 Separation between display part and stand part

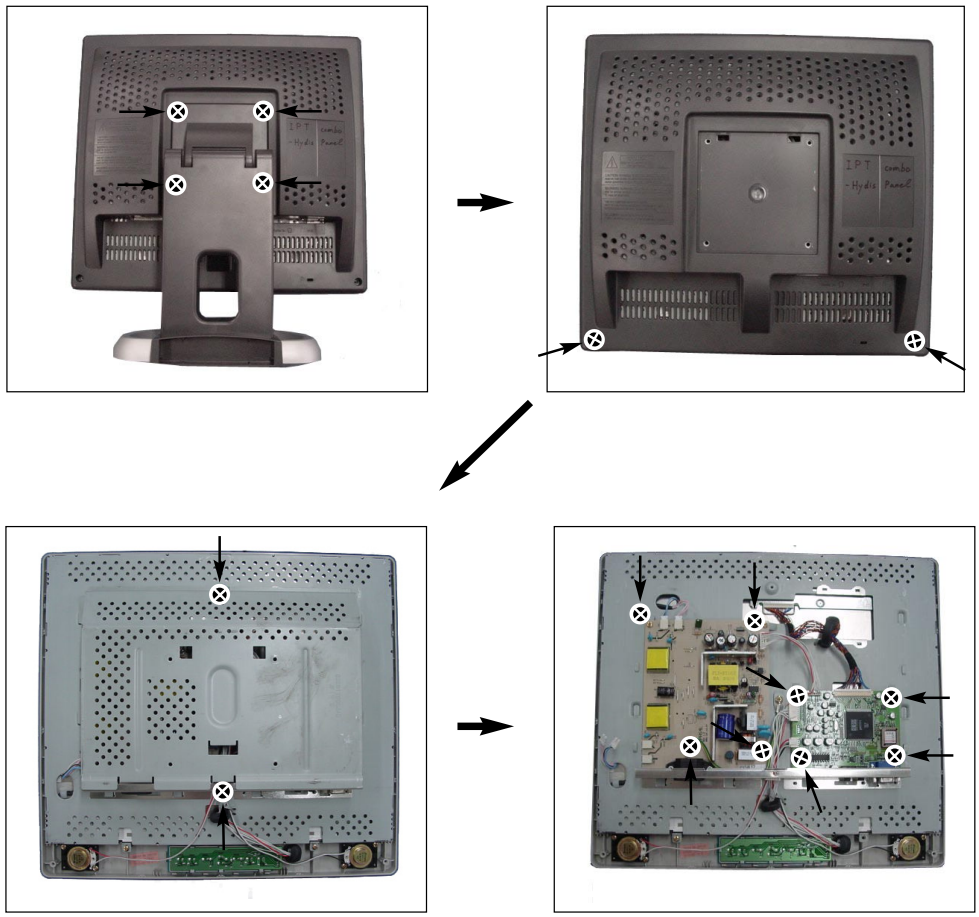
1. Diconnect Power Cord and Signal Cable.
2. Remove the 4 screws on the stand.
3. Pry it off the back stand of the monitor.

3-1-2 The Display part Disassembly

The Rear housing Removal

1. Remove the 2 screws on the rear corner of the Rear Cover.
2. Remove Rear Cover from the Front Cover.
3. Remove 2 screws on the Rear Shield Cover and remove it.
4. Disconnect Combo harness and LVDS harness.
5. Remove 4 screws on the Main PCB.
6. Remove 1 screws on the F.G cable of Combo Board.
7. Remove 4 screws on the Combo Board Assembly and then remove it.
8. Remove I/O Shield.
9. Disconnect Key harness on the Main Board.
10. Remove the LVDS harness on the Panel.
11. Remove 2 screws on the Main chassis.
12. Remove Front Cover.
13. Remove 4 screws on the Side of Panel.
14. Remove the Main chassis.

※ Figure



3-2 Reassembly

3-2-1 Display part Reassembly

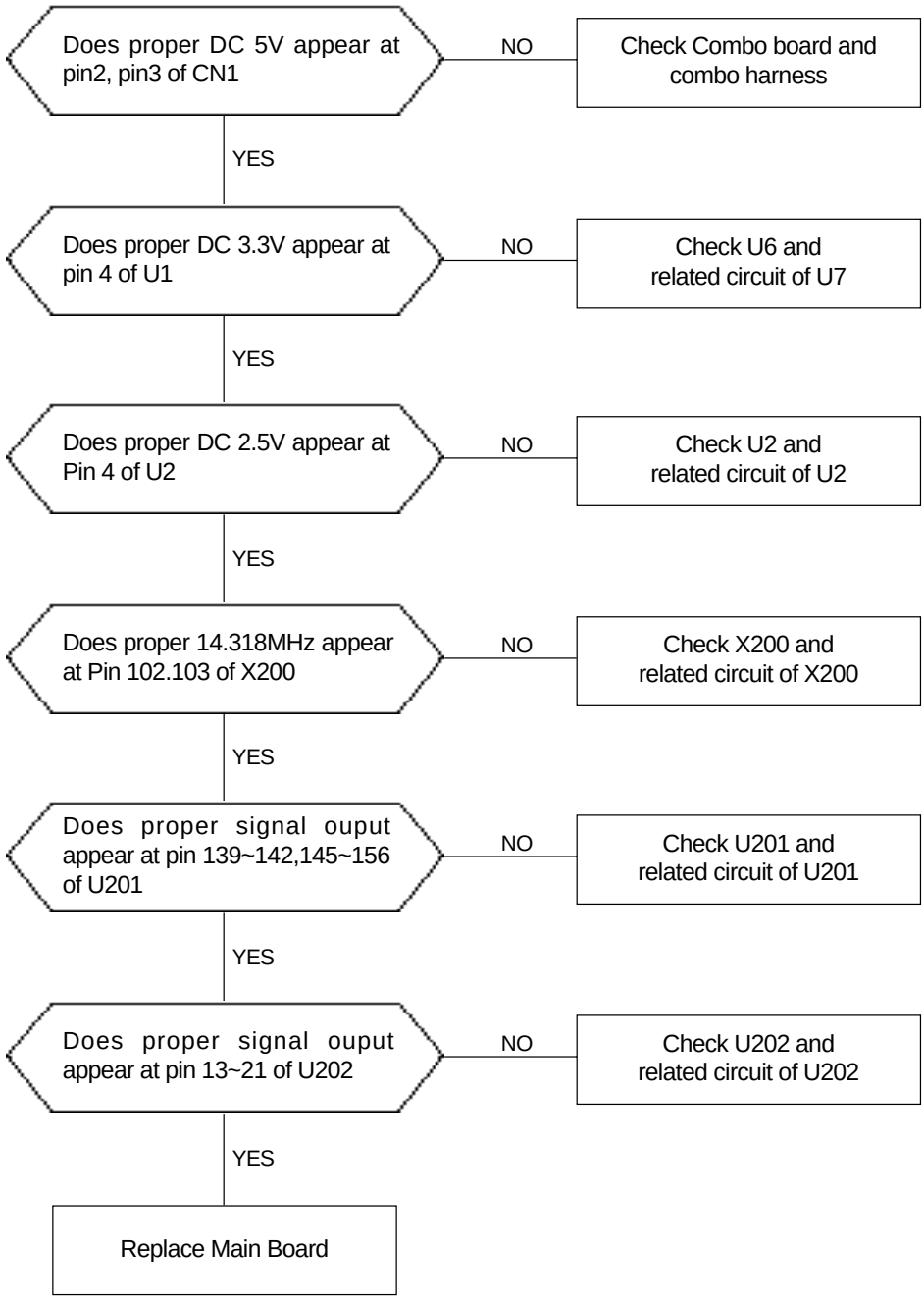
As you reassemble reversely the display part dissambly method, confirm that insulation plate puts into on the left of the TFT-LCD panel and main chassis.

3-2-2 Display part and Stand part Reassembly

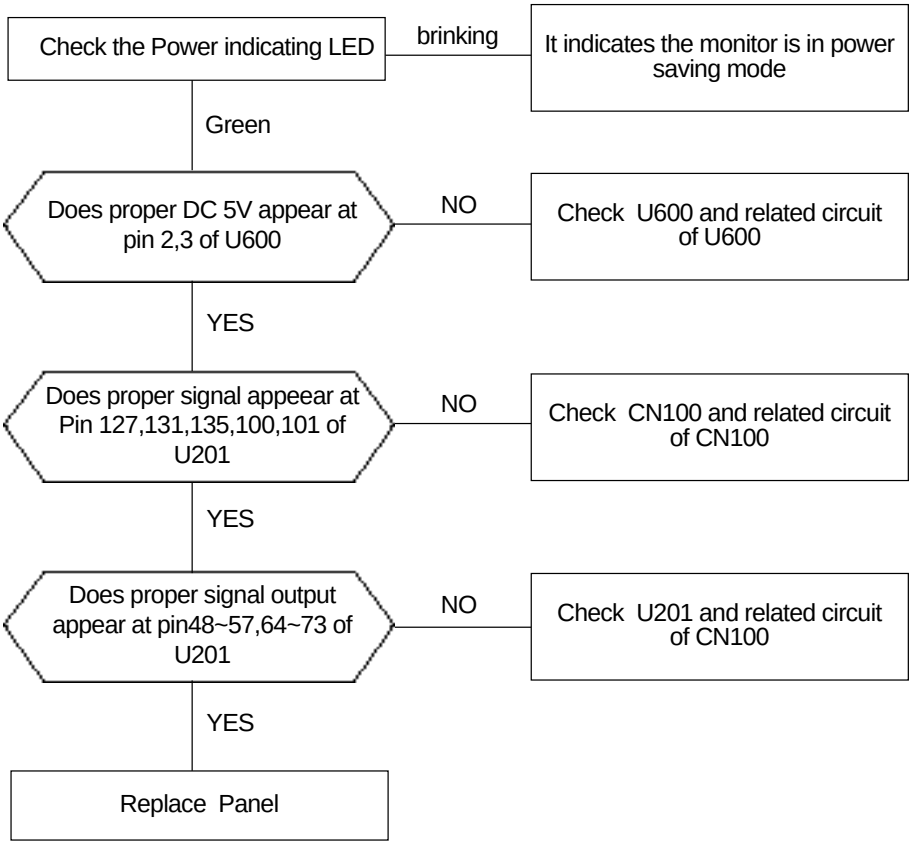
Reassembly reversely the Multimedia Stand part disassembly method.

4. Troubleshooting

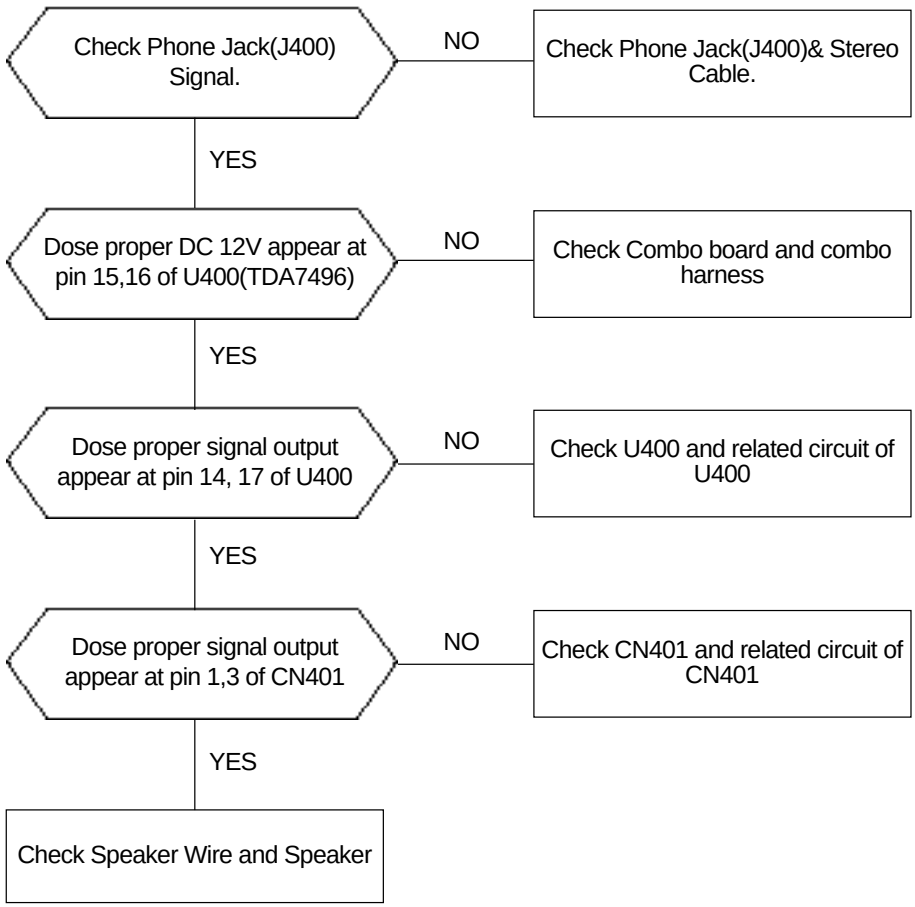
4-1 No Power



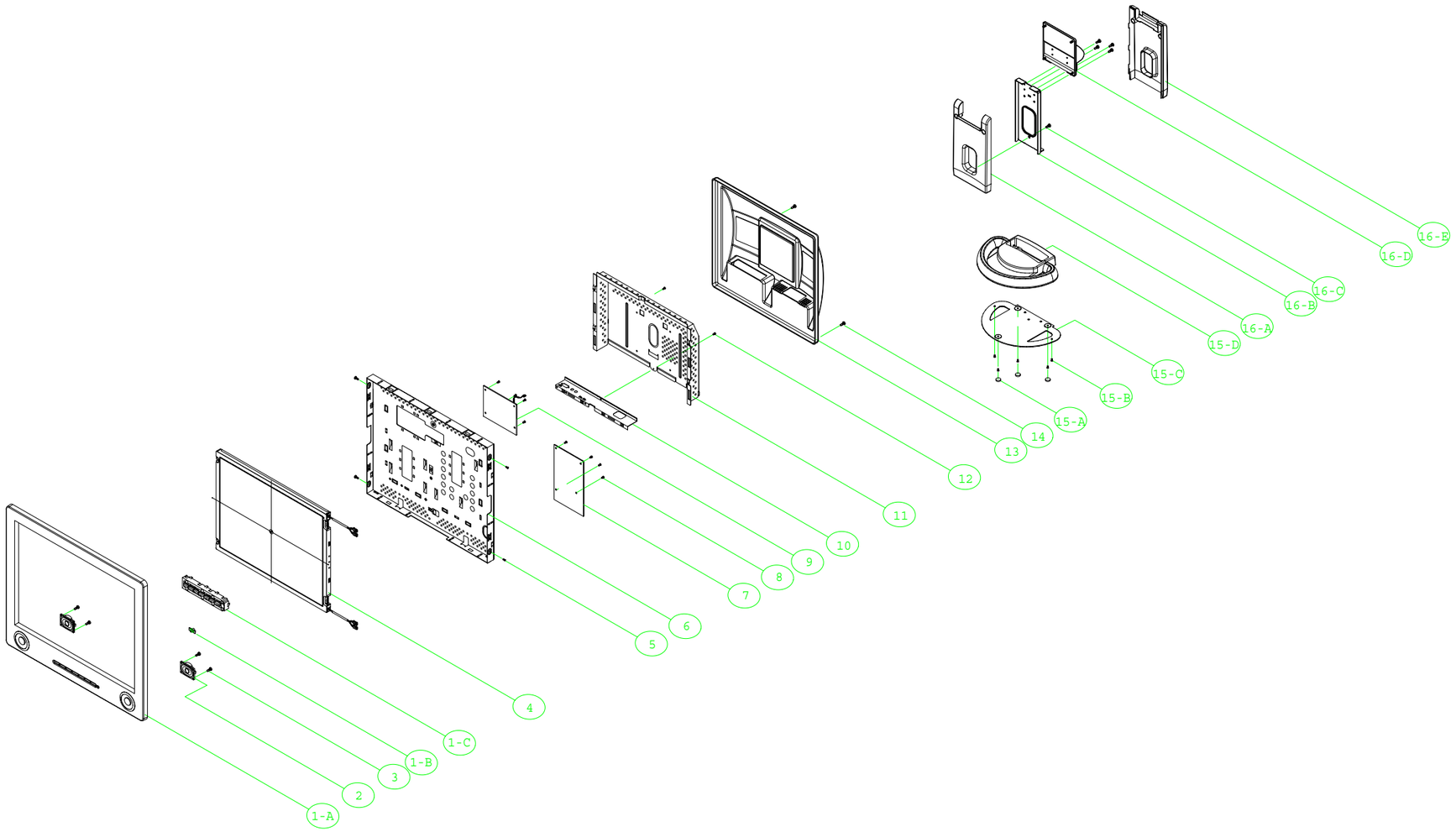
4-2 No Video


Check the Power indicating LED
brinking
It indicates the monitor is in power saving mode
Green
Does proper DC 5V appear at pin 2,3 of U600
NO
Check U600 and related circuit of U600
YES
Does proper signal appeear at Pin 127,131,135,100,101 of U201
NO
Check CN100 and related circuit of CN100
YES
Does proper signal output appear at pin48~57,64~73 of U201
NO
Check U201 and related circuit of CN100
YES
Replace Panel

4-3 No Sound


Check Phone Jack(J400) Signal.
NO
Check Phone Jack(J400)& Stereo Cable.
YES
Dose proper DC 12V appear at pin 15,16 of U400(TDA7496)
NO
Check Combo board and combo harness
YES
Dose proper signal output appear at pin 14, 17 of U400
NO
Check U400 and related circuit of U400
YES
Dose proper signal output appear at pin 1,3 of CN401
NO
Check CN401 and related circuit of CN401
YES
Check Speaker Wire and Speaker

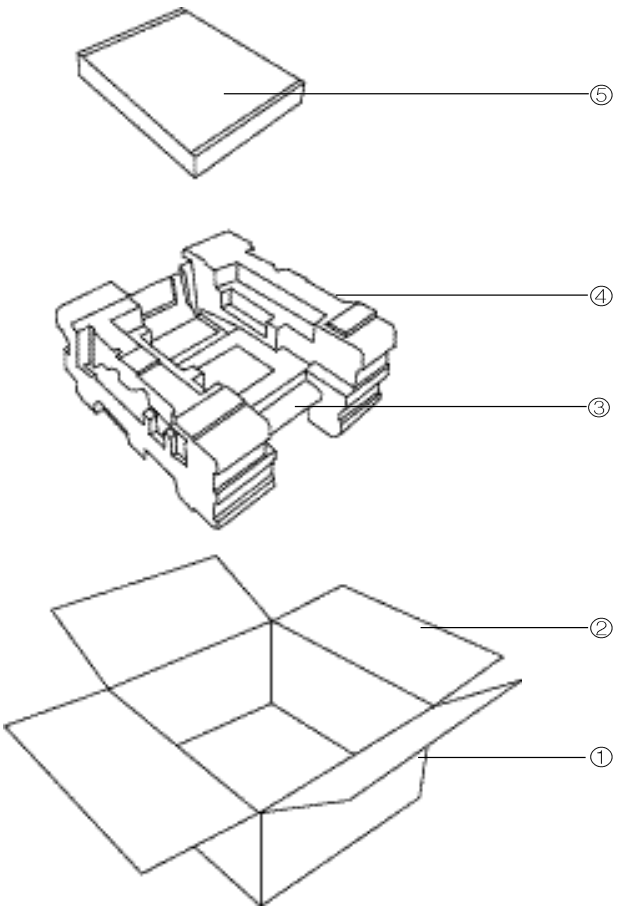
7. Exploded View & Parts List



Exploded View & Parts List

NO.	PART NAME	CODE NO.	DESCRIPTION	Q'TY	REMARKS
1	BEZEL FRONT ASS'Y	6526170009AD	-	1	
1-A	BEZEL FRONT	6226170014AD	H750,OEM,MAXDATA, SILVER(B2050),ABS-HB,SD-0150,C7425	1	
1-B	LENS,POWER	6226170020AD	H750/H550,OEM,PMMA	1	
1-C	KNOB CONTROL	6226170030AD	H750,OEM,MAXDATA, SILVER(B2050),ABS-HB,SD-0150,C7425	1	
2	SPEAKER	56410003AAAD	NB-04301-15,1 ½ X1 ¼ INCH,8 OHM, 350HZ,1.0W	2	
3	T/T,SCREW	67613004AAAD	BHB,+,3 ×8,.,"	4	
4	17""TFT-LCD PANEL	5417L00814AD	LTM170EU-L01,LVDS,8BIT,16.2M, SXGA(1280*1024),4CCFL,75HZ	1	
5	MACHINE,SCREW	68660001AAAD	BH,M3 ×6	4	
6	MAIN,CHASSIS,ASS'Y	6526170004AD	H750,SECC,1.0T,AMLCD,HYDIS	1	
7	ASS'Y, COMBO B'D	3322330002VD	17"",SMPS-12V/5V,48W, INVERTER-6.5MARMS,IPT/BENTEK	1	
8	T/T,SCREW	67613007AAAD	BH,B-TYPE,+,M3X6	8	
9	ASS'Y, PCB MAIN,DIP	0526171002AA	TFT,B17CF(H750_AMLCD),PCB MAIN,DIP	1	
10	IO,SHIELD	6326170005AD	SPTE,0.5T	1	
11	SHIELD,COVER	6326170003AD	SECC,1.0T	1	
12	T/T,SCREW	67613007AAAD	BH,B-TYPE,+,M3X6	2	
13	HOUSING,REAR	6226170002AD	ABS-HB,SD-0150,K2440	1	
14	T/T,SCREW	67613012AAAD	BHB,+,M4X 10,BLACK	2	
15	STAND,BASE,ASS'Y	0926170001AD	-	1	
15-A	RUBBER,FOOT	6222990001AD	NR,15.2 ¢,1.3T,GRAY(423C)	3	
15-B	T/T SCREW	67213001AAAD	FHB,+,3 ×8	5	
15-C	BOTTOM,PLATE	6326170007AD	SECC,2.0T	1	
15-D	STAND,BASE	6226170010AD	ABS-HB,SD-0150,K2440, SILVER_SPRAY(S33-740-A8912)	1	
16	STAND,NECK,ASS'Y	0926170002AD	-	1	
16-A	STAND,FRONT	6226170004AD	ABS-HB,SD-0150,K2440	1	
16-B	BODY,FRAME	6326170006AD	SECC,2.0T	1	
16-C	T/T,SCREW	67613012AAAD	BHB,+,M4X 10,BLACK	5	
16-D	HINGE,ASS'Y	6526170002AD	ABS-HB,SD-0150,K2440	1	
16-E	STAND,BACK	6226170005AD	ABS-HB,SD-0150,K2440	1	

6. Packing & Unpacking



No	Description	Specification	Quantity	Remarks
1	Tape-Masking	OPP W75 CLR	1.2 Mt	-
2	Carton Box	Belinea 101725	1EA	CB DW-3
3	Set-Monitor	Belinea 101725	1Set	EPS 60M C=0.018
4	Cushion-L/R	Belinea 101725	1Set	17" TFT Monitor
5	Gift Box	Belinea 101725	1EA	Cable Etc.

7. Electrical Parts List

7-1. MAIN BOARD

LOCATION No.	PART NO.	TYPE	DESCRIPTION
CE1,CE2,CE5,CE6,CE205,CE600	276604763CHD	CAP, CAN-ELECT,G.P	47UF, 16V, 20%, CASE:6.3X5, -40 ~ +85℃ ,SMD
CE3,CE4	276601073CHD	CAP, CAN-ELECT, G.P	100UF, 16V, 20%, CASE:6.3X6, -40 ~ +85℃,SMD
CE7,CE200,CE201,CE202,CE203,CE204	276602263CHD	CAP, CAN-ELECT,G.P	22UF, 16V, 20%, CASE:5X5, 5M, -40 ~ +85℃,SMD
C1,C2,C3,C4,C5,C6,C7,C100,C200,C201, C202,C203,C204,C205,C206,C207,C209, C210,C211,C212,C213,C214,C216,C217, C218,C219,C220,C221,C222,C223,C224, C225,C226,C229,C230,C232,C233,C400, C403,C602	26508R0015MD	CAP, CERAMIC	0.1UF, 50V, +80%/-20%, Y5V, SMD, 1608
C101,C102,C103,C104,C105,C106	265001038APJ	CAP,CERAMIC	0.01UF, 50V, 10%, X7R, SMD, 1608
C208,C215,C231	26508902219D	CAP, CERAMIC	220PF, 50V, 5%, COG, SMD, 1608
C604,C605	26508900509D	CAP, CERAMIC	5PF, 50V, 5%, COG, SMD, 1608
C603	265001028APJ	CAP CERAMIC	1000PF, 50V, 10%, X7R, SMD, 1608
R100,R110,R210,R211,R212,R217,R218, R602,R617,R625,R626,R627	21701037AT	RES,CHIP,CT	10K OHM, 5%, 1/16W, 1608
R3	21701027AT	RES,CHIP,CT	1K OHM, 5%, 1/16W, 1608
R4,R5	21704717AT	RES,CHIP,CT	470 OHM, 5%, 1/16W, 1608
R7	21703337AT	RES,CHIP,CT	33K OHM, 5%, 1/16W, 1608
R219,R220,R402,R408,R604,R608,R609	21704727AT	RES,CHIP,CT	4.7K OHM, 5%, 1/16W, 160
R103,R405,R603,R610,R611,R612,R613, R614,R615,R616	21704737AT	RES,CHIP,CT	47K OHM, 5%, 1/16W, 1608
R106,R107,R109,R607,R618,R619,R620, R621,R622,R623,R624	21702417AT	RES,CHIP,CT	240 OHM, 5%, 1/16W, 1608
R111,R112,R113	21707505AATD	RES,CHIP,CT	75R,1%,1/16W,1608
R119,R120,R209,R215,R216	21700007AT	RES,CHIP,CT	0 OHM, 5%, 1/16W, 1608
R101,R118,R121,R605,R606,R629,R728	21701017AT	RES,CHIP,CT	100 OHM, 5%, 1/16W, 1608
R200	21701057AT	RES,CHIP,CT	1M OHM, 5%, 1/16W, 1608
R213,R214,R632,R633	21704707AT	RES,CHIP,CT	47 OHM, 5%, 1/16W, 1608
R300	21703317AT	RES,CHIP,CT	330 OHM, 5%, 1/16W, 1608
R404	21703347AATD	RES,CHIP,CT	330K,5%,1/16W,1608"
FB1,FB2,FB3,FB4,FB5,FB6,FB7,FB8, FB200,FB201,FB202,FB203,FB204,FB300	3222180004CD	EMI FILTER	BEAD,300 OHM,3A,SMD,2012
D100	3514AT5492TD	DIODE,SCHOTTKY	BAT54C, 30V, 200MA, 230W, SOT-23, TAPING, LOW DROP, DIODE
D104,D105,D106 TAPING	3521000394TD	DIODE, SW	BAV99/MMBD1203, 200MA, 70V-100V, SOT-23,
D101,D102,D103,ZD107,ZD108	3531003594TD	DIODE, ZEN"	REV.01, BZX84C5V6,5.6V,SOT23"
U1	15311117IAAF	IC,LINEAR"	REV.01, LM1117MPX-3.3/AME1117CCGT, SOT-223, REGULATOR
U2 U100	15310317IAAF 16624C21DAAF	IC,VOLTAGE REFERENCE IC,MEMORY	LM317EMPX, 1A, SOT-223 AT24C21A-10SC-2.5,SOIC-8PIN
U200	16624C16DAAF	IC,MEMORY	AT24C16N-10SC-2.5/CAT24WC16J,16K,I2C,SOIC-8PIN
U201	15712121EAAF	IC, SCALER	GM2121, SXGA, 2.5V/3.3V, PGFP-160PIN
U600	30693863TZZF	IC,FET	SI3863DV,MOSFET, VDS=-30V,RDS(ON)=75MOHM.ID=-3.6A

LOCATION No.	PART NO.	TYPE	DESCRIPTION
X200	3120014318MD	CRYSTAL	REV.01, 14.318MHZ,33PF, ±30PPM,TS-1 TYPE,SMD
CE400,CE401,CE402,CE403	276602273CTD	CAP,CAN-ELECT,GP	220UF,16V,20%,CASE:8*10,-40~+85'C,SMD
C401,C402	26508R0474MD	CAP, CERAMIC	0.47UF, 50V, +80%/-20%, Y5V, SMD, 1608
FB601,FB600	3222180002CD	EMI FILTER	BEAD,120 OHM,200MA,SMD,1608
Q400,Q401,Q601	303900031ACB	TR, NPN	REV.01, MMBT3904 LTI,3P,SOT-23
R114,R115,R116	21705607ASTD	RES,CHIP CT	56 OHM,5%,1/16W,1608
R634,R650	21701047AT	RES,CHIP,CT	100K OHM, 5%, 1/16W, 1608
R401	21701547AT	RES,CHIP,CT	150K OHM, 5%, 1/16W, 1608
R201	21701007AT	RES,CHIP,CT	10 OHM, 5%, 1/16W, 1608
R2	21702047AATD	RES,CHIP,CT	200 OHM,5%,1/16W,1608
U601	15217025IAAD	IC,VOLTAGE DETECTOR	KIA7025F,SOT-89,RESET
C601	26508R0224MD	CAP, CERAMIC	0.22UF, 50V, +80%/-20%, Y5V, SMD, 1608
U202	4631050005FD	CONNECTOR,IC SOCKET	32PLCC,1.27MM PITCH,F/M,S/T,BROWN
CN301	4621150009ID	CONNECTOR,SMT WAFER	REV.01, 12507WR-30A00, 30P MALE, 1.25MM, LVDS WAFER
U400	15717496AAAF	IC,LINEAR	TDA7496L,14V,25MA,2W+2W,8Ω,AUDIO AMP+DC VOLUME,16P,DIP
J401,J400	4641010005KD	CONNECTOR, STEREO JACK	DJ-36SP, 5P RIGHT ANGLE PCB LOCKING, PBT UL94V-O, BULK
CN400	4610110002WD	CONNECTOR	4PIN,2.0MM,MALE,RIGHT ANGLE,SMAW200-4,WHITE
	15712901GAAF	IC,FLASH MEMORY	W29EE011P-90, 1MBIT,5V,90NS,32PLCC,WINBOND
CN100	4611010013BD	CONNECTOR, D-SUB	DJ-15FAP,15P FEMALE RIGHT ANGLE, PBT UL94V-O,BLUE,HEXAGON NUT
CN1	4922120060KD	HARNESS,COMBO CABLE ASS'Y	8TO 8PIN(SMH200-08,BOARDIN-YBNH200-05/YBST200),90MM,1061#26
CN300	4622110001KD	CONNECTOR	9PIN,2.0MM,MALE,RIGHT ANGLE,SMAW200-9

7-2. OSD KEY BOARD

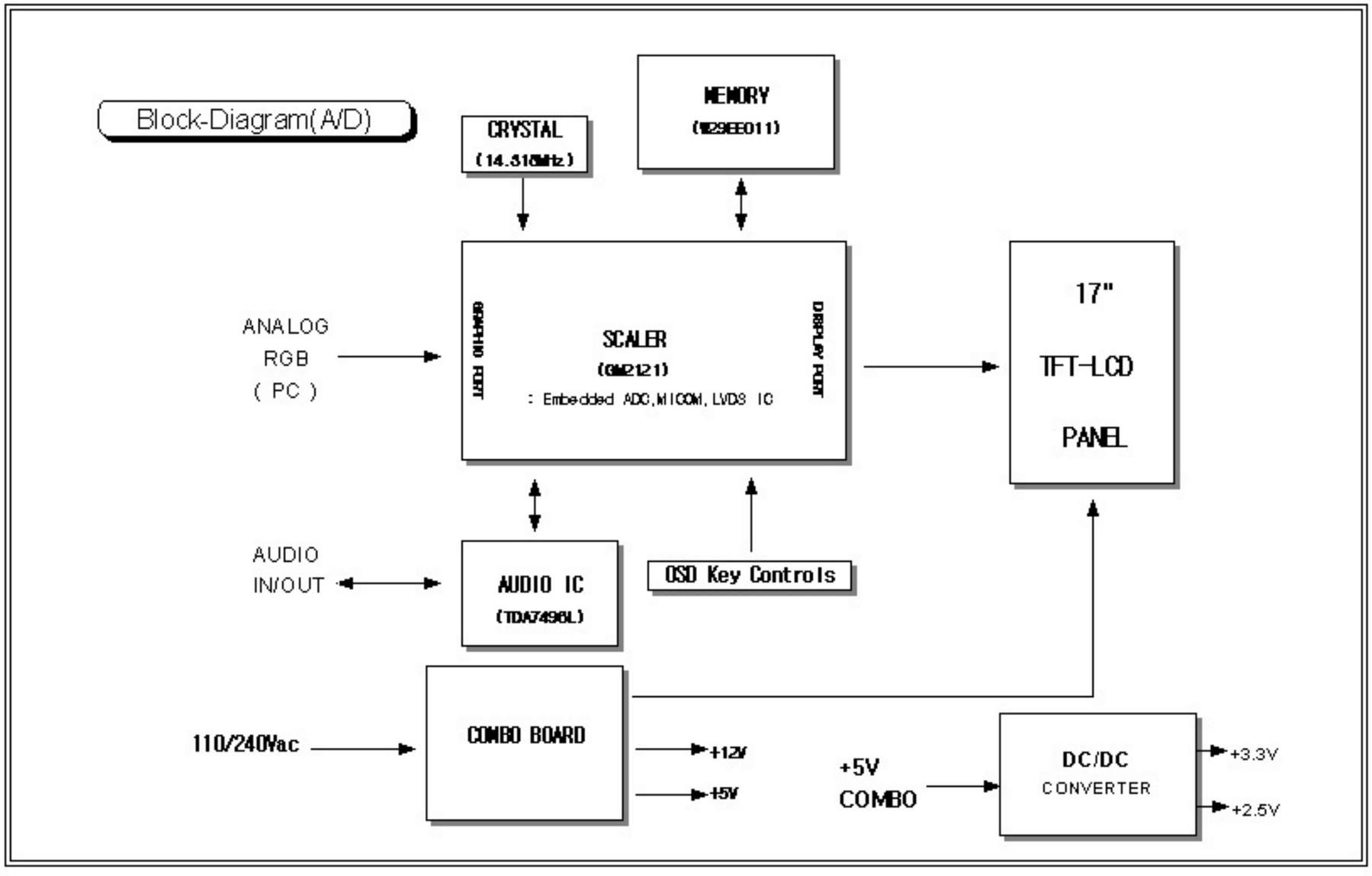
LOCATION No.	PART NO.	TYPE	DESCRIPTION
ZD500,ZD501,ZD502,ZD503,ZD504,ZD505, ZD506,ZD507	3531001492TD	DIODE, ZEN	MTZJ 5.1B/UZ-5.1BSB, 5.1V, 5MA, 500MW,T-72, AT
SW501,SW502,SW503,SW504,SW505, SW506,SW507	58210006RAAD	SWITCH,TACT	DHT-1105TABF,2P, RESET S/W,DC12V,50MA,5MM,TAPING,H530
D504	3541000311TD	DIODE, LED	REV.01, SM3411/HB3B-243, 85MW, 30MA, GREEN, TAPING
	4922120061KD	HARNESS,KEY CABLE ASS'Y	9*10P(SMH200-08, B'D IN)WIRE255MM,UL1061#26,CORE(RING18),H750

7-3. OTHERS

PART NO.	TYPE	DESCRIPTION
3322330002VD	ASS'Y, COMBO B'D	17"",SMPS-12V/5V,48W,INVERTER-6.5MARMS,IPT/BENTEK
4922120059KD	HARNESS,SPEAKER CABLE ASS'Y	4PIN(SMH200-04(BLACK),WIRE 230MM,UL1061#26
4922190003RD	HARNESS, LVDS CABLE ASS'Y	180 ±5MM, 30P, UL1571 #30, CORE, RED/BLUE/BLACK, H711
56410003AAAD	SPEAKER	NB-04301-15,1 ½ X ¼ INCH,8 OHM,350HZ,3.0W
4822110001KD	CABLE FORM,POWER CORD 230V	230V,1800MM,NORMAL,DETACHED,ST
482220013KD	VIDEO SIGNAL CABLE ASS'Y	1800 ± 50MM,φ5.5,BLACK,15P(9PIN:5V),DETACHED CONN
5417L00814AD	TFT LCD PANEL 17.0""""	LTM170EU-L01,LVDS,8BIT,16.2M,SXGA(1280*1024),4CCFL,75HZ
6521990101AD	USER'S MANUAL,ASS'Y	REV.01,10LANG,MAXDA ┬A, TCO'99 ,210X297
4822210014KD	STEREO IN CABLE ASS'Y	DH-1800SCP,BLACK,1800 ±30MM,UL 2851 #28 2C,ATTACHED CONN'

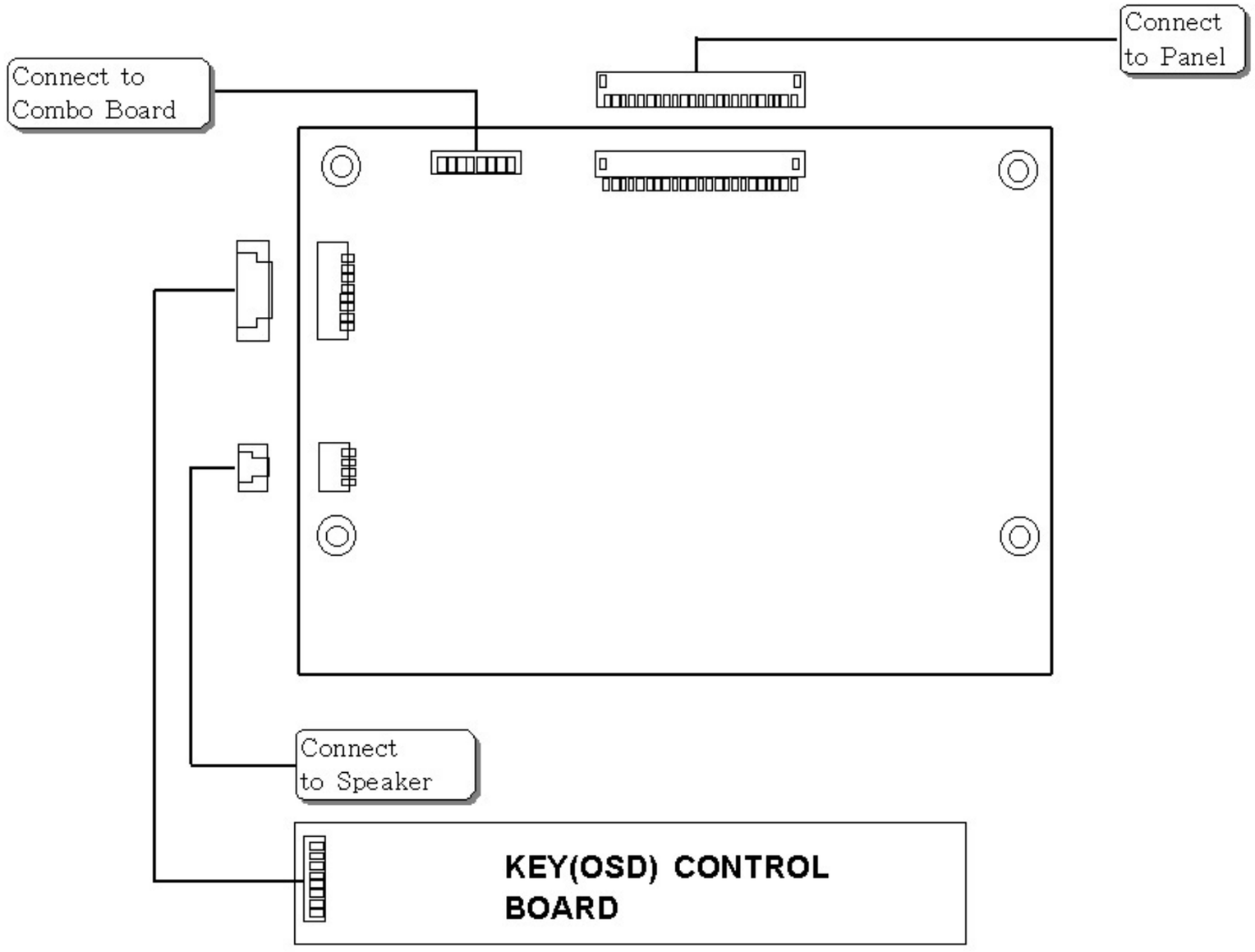
Block Diagram

8. Block Diagram



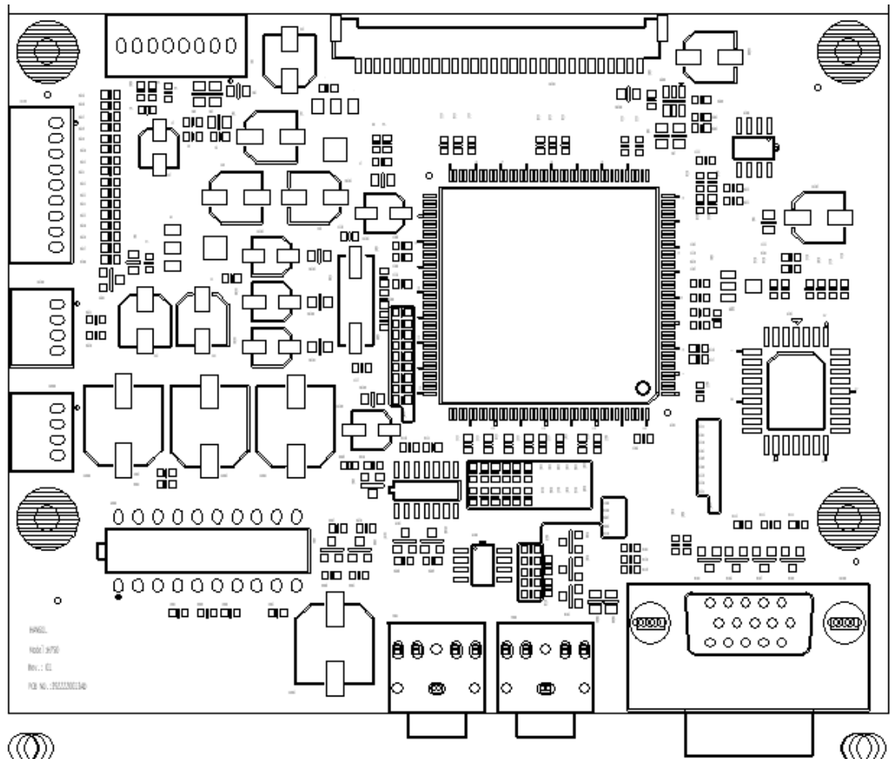
Wiring diagram

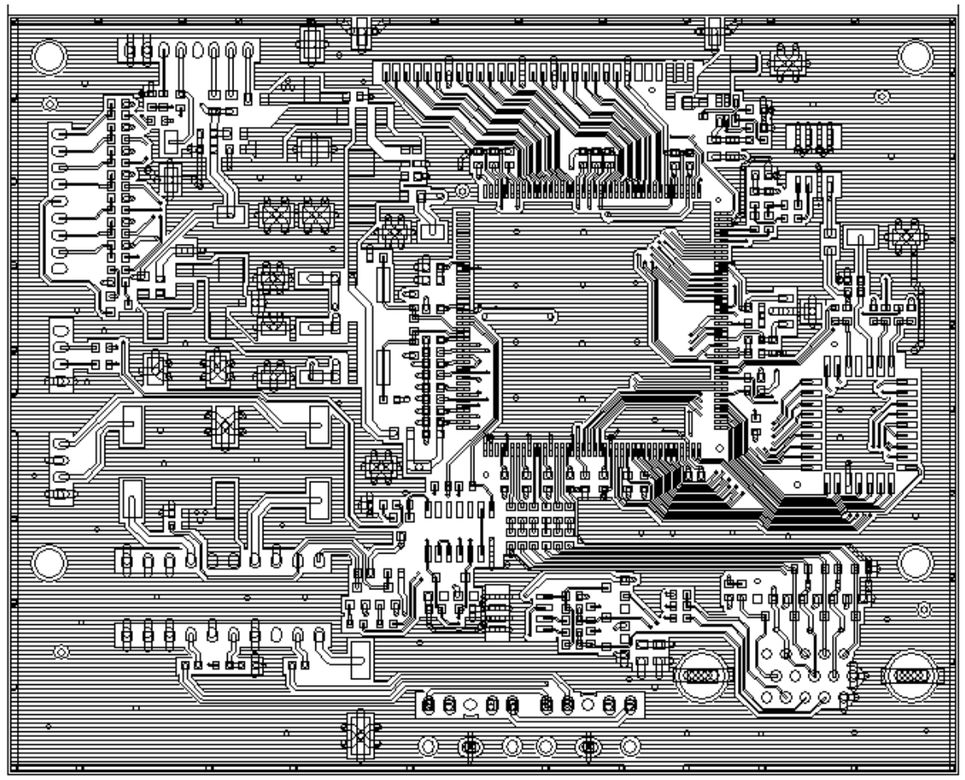
9. Wiring diagram

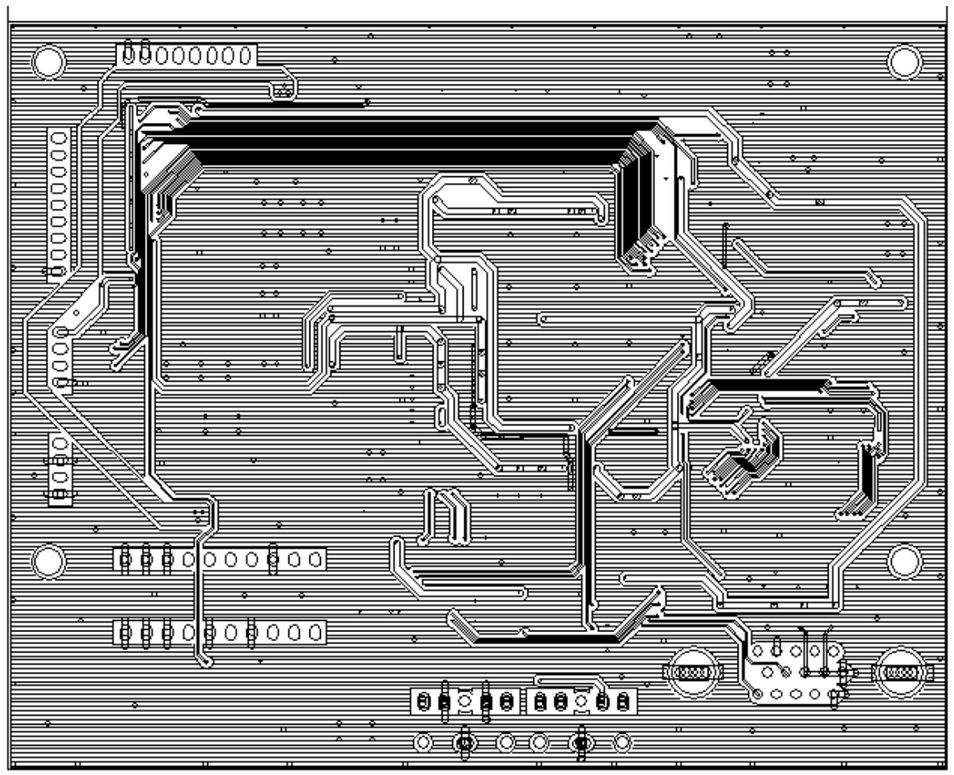


10. PCB Layout

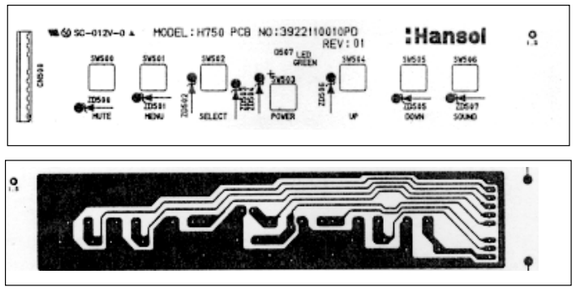
10-1. Main PCB



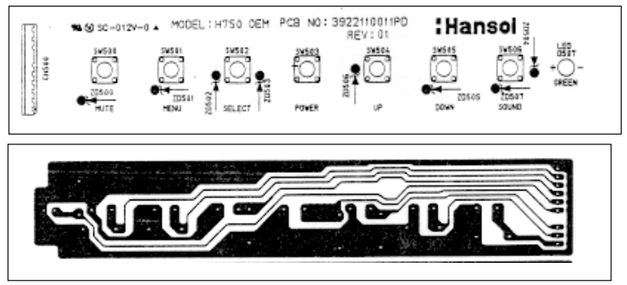




10-2. Key PCB



10-3. Key PCB (OEM)



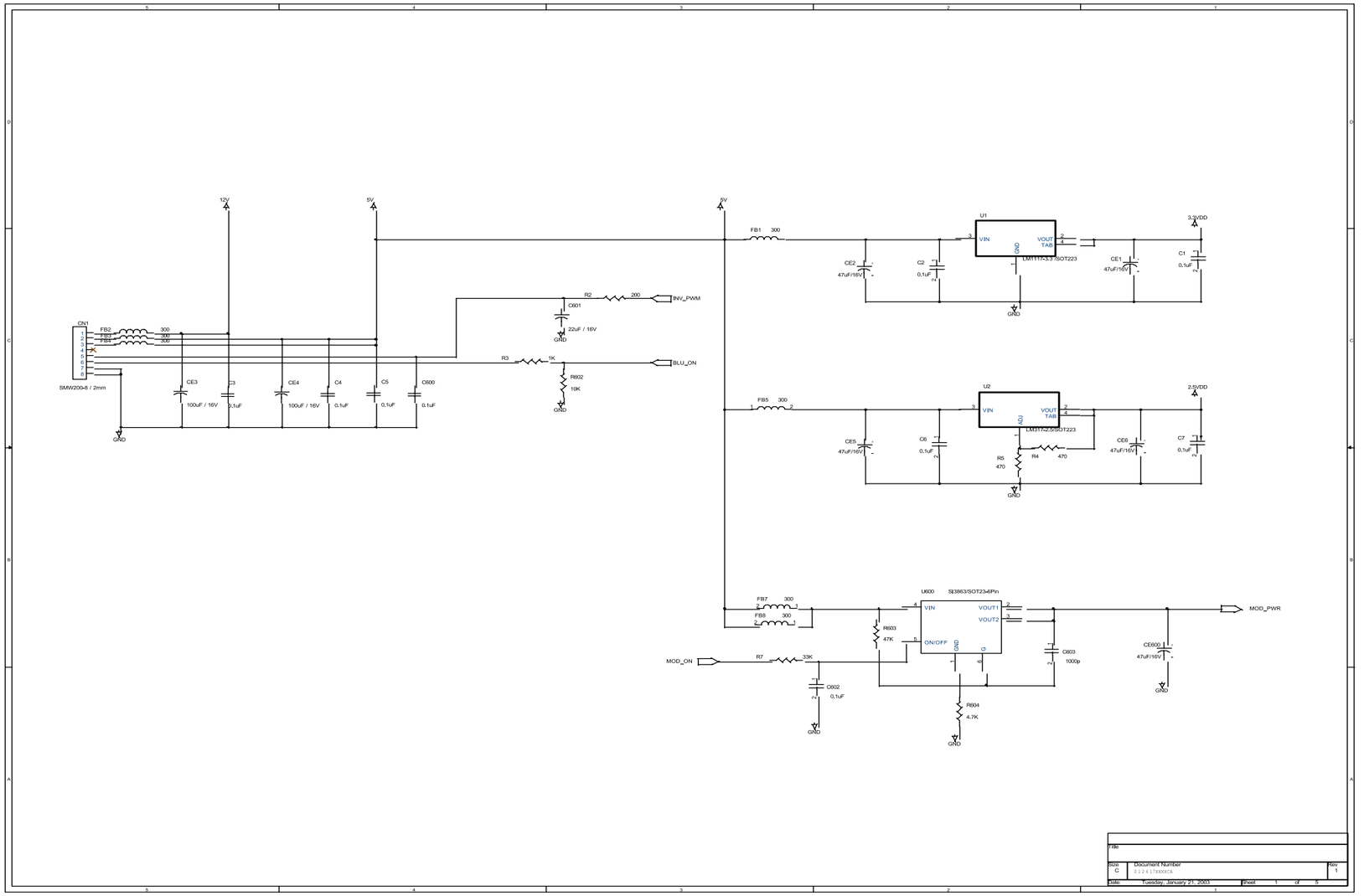
10-4. Semiconductor Lead Identification.

PARTS	TYPE NO.	REF NO.
	MMBT3904	Q400, Q401, Q402, Q601
	BZX84	D101, D102, D103, ZD107, ZD108
	BAT54	D100
	BAV99	D104, D105, D106
	GM2121	U201
	KIA7025	U601
	W29EE011	U202
	24C16	U200
	24C21	U100
	TDA7496L	U400
	LM1117	U1
	LM317	U2
	SI3863	U600

Schematic Diagrams

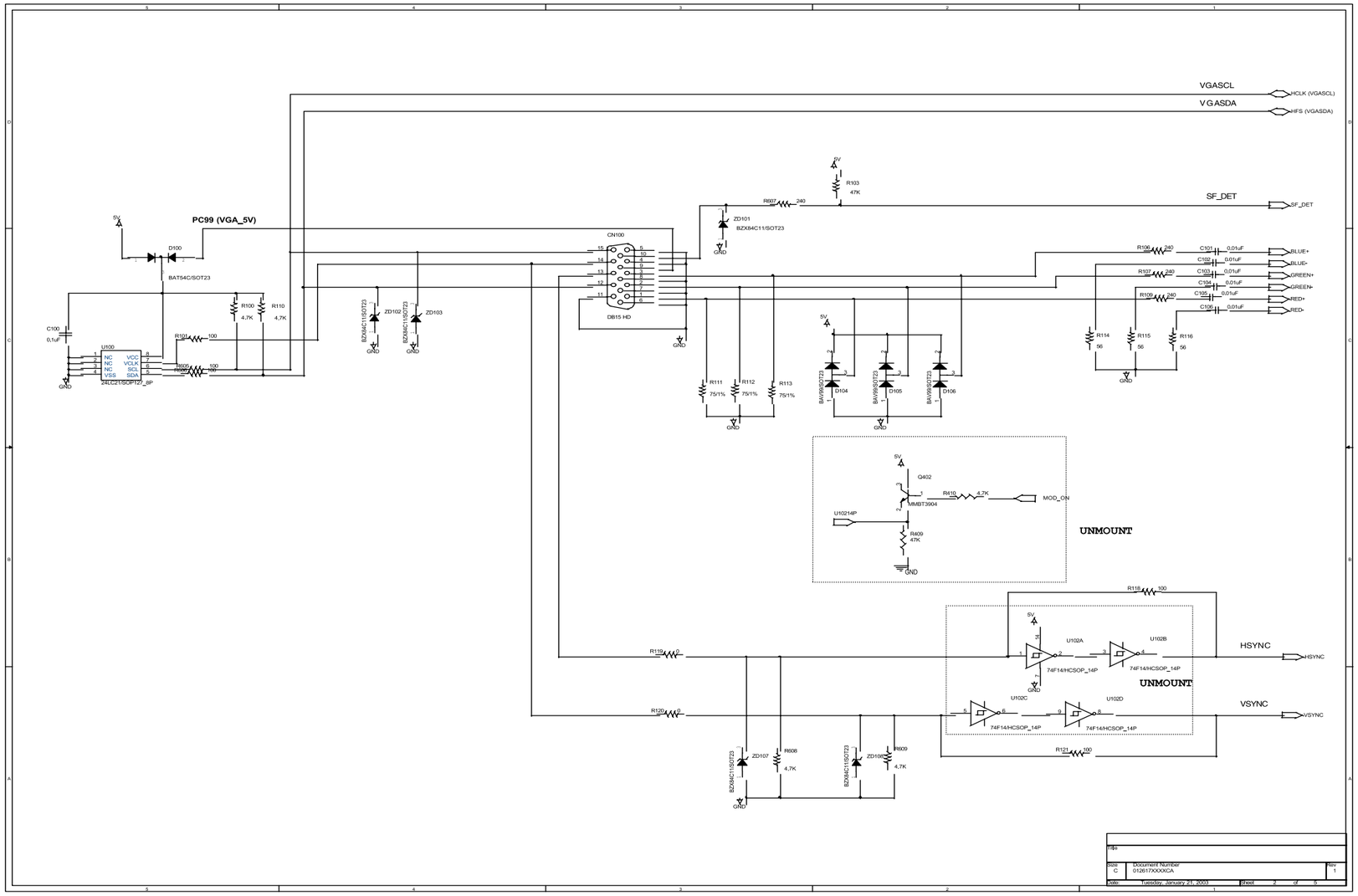
11. Schematic Diagrams

11-1. Main Board



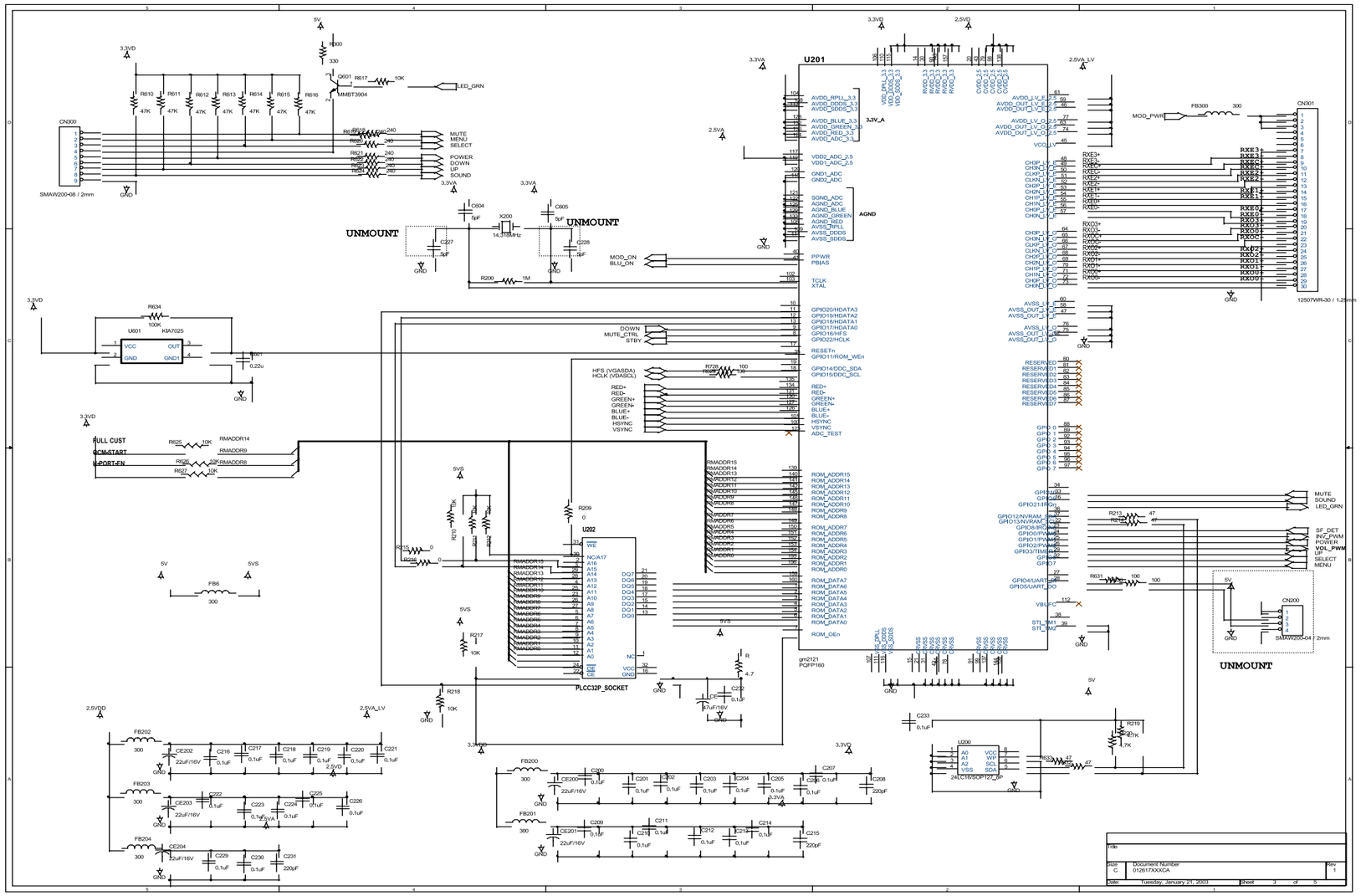
Schematic Diagrams

11-1. Main Board



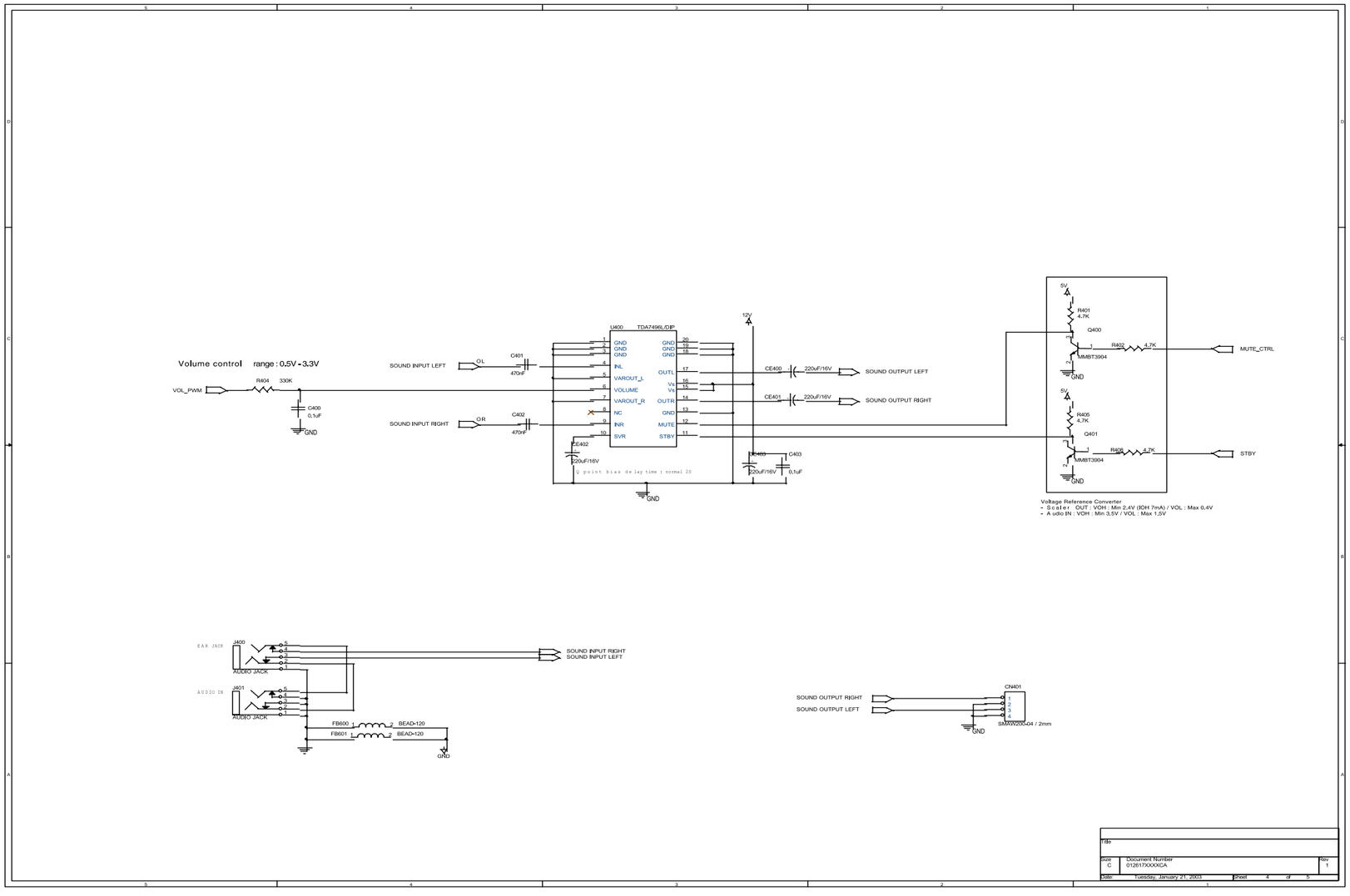
Schematic Diagrams

11-1. Main Board



Schematic Diagrams

11-1. Main Board



Schematic Diagrams

11-2. Key Control Board